ISSN (Print): 2788-8320 ISSN (Online): 2788-8339

JOURNAL OF SOCIAL RESEARCH DEVELOPMENT
www.jsrd.org.pk editor@jsd.org.pk

PIXELS AND POLICY: THE SYMBIOTIC RELATIONSHIP BETWEEN DIGITALIZATION AND INTERNATIONAL TRADE LEGISLATION

Hazrat Usman[1], Fouzia Khaliq[2] & Khwaja Hashim Shaheen[3]

[1]Lecturer, Department of Law, Mohi-Ud-Din Islamic University, Nerian Sharif, AJ&K, Pakistan
[2]Lecturer, Department of Law, Mirpur University of Science & Technology (MUST), Pakistan
[3]Section Officer, Department of Law, Parliamentary Affairs & Human Rights, GOAJ&K, Pakistan

KEYWORDS

Digital Jurisprudence, Legal Tech Challenges, Ethical Groundings, DRL, LTE, Digital Legal Systems

ARTICLE HISTORY

Date of Submission: 21-08-2023
Date of Acceptance: 27-09-2023
Date of Publication: 29-09-2023

ABSTRACT

In an era where digital frontier continually reshapes our jurisprudential landscape, this research embarks upon an odyssey to decipher its complex tapestry. Employing a qualitative approach, it delves deep into interplay between burgeoning data realms and legal scaffolds, drawing insights from extensive array of scholarly literature. The investigation unveils that confluence of data and law transcends mere operational shifts; it signals a profound transformation in our societal ethos. Findings underline the dual-edged nature of this evolution: while legal tech offers unparalleled chances for enhanced oversight and efficiency, it concurrently provokes challenges related to privacy & surveillance. In conclusion, as we stand at cusp of this digital jurisprudential metamorphosis, it becomes imperious to cultivate a balance, imbuing legal structures with prowess of technology yet anchored by enduring tenets of justice and human rights. The suggestions include fostering interdisciplinary dialogues & proactive regulatory frameworks, ensuring that our march into the digital future remains both the innovative and ethically grounded.

Correspondence Hazrat Usman
Email: hazratusmanadvocate@gmail.com
DOI https://doi.org/10.53664/JSRD/04-03-2023-04-570-588

INTRODUCTION

In a time when the distinction between physical and digital realms becomes increasingly blurred, the world of international trade law undergoes significant transformation. William Gibson's insight that "The future is already here it is just not very evenly distributed" (Gibson, 1999) captures the essence of this evolution, as digitalization permeates the commercial sphere, transforming a realm once dominated by tangible goods and written contracts. The digitalization transcends being mere technological milestone, instead becoming the lifeblood of contemporary commerce. This shift is

revolutionizing the long-standing foundations of trade legislation, introducing a complexity and multifaceted nature that challenges traditional understanding (Castells, 2011). This convergence of digitalization and international trade law can be likened to form of legal alchemy, a transformative process where the essence of modern human interaction intertwines with the governing norms of the trade. In this connection, advent of 21st century brought with it not just technological innovations, but a shift in ontologies.

The blockchain, e-commerce, and artificial intelligence are now challenging not only in everyday trade practices but also the required epistemological foundations of global trade law, necessitating a reexamination of established legal frameworks (Harari, 2016; Tapscott & Tapscott, 2016). Thus, addressing this challenge require aligning our laws with the "genius, manners and habits" of society, as advocated by (Montesquieu, 1989), ensuring they are aptly suited for an era dominated by the digital interaction. This raises a crucial question: In a digital age, what should be the "manners and habits" that shape international trade laws? The answer to this question is imperative, as it directly influences the direction of policy, governance, and the broader social contract, setting the stage for a robust and equitable international trade system in the digital age (Lessig, 2001; O'Reilly, 2017). To grasp the intricate interplay between the digital phenomena and policy frameworks, one must embrace an existential perspective, recognizing the unparalleled implications at hand in diverse situations. This is not merely an intellectual pursuit; it is a crucial necessity for navigating complex realities of our time.

The economic dimensions are vast and staggering, with the World Economic Forum projecting that digitalization could unlock value up to $100 trillion for society and industry by 2025, illuminating the immense potential and transformative power of this digital revolution (Schwab, 2015). Still, this potential boon is accompanied by formidable challenges; the increased connectivity and reliance upon digital platforms amplify vulnerabilities, introducing complex issues related to cybersecurity, data privacy, and intellectual property that necessitate a robust and responsive international trade law framework (Ventures, 2021). Beyond the economic ramifications, this digital integration also raises critical questions about the social contract, inviting us to reflect upon the nature of freedom, security, and collective welfare in digital age (Castells, 2011; Rousseau, 1987). Thus, navigating this dynamic landscape requires a comprehensive understanding of the intricate relationship between digitalization and international trade law, thus recognizing the dual nature of this transformation as both are considered as the source of existential risk and an unprecedented opportunity (Fukuyama, 2006; Schwab, 2015).

This research endeavor is not just an academic exercise; it is call to action for scholars, policymakers, and industry leaders to engage deeply with these issues, employing interdisciplinary approaches to unravel the complexities of this new world order. By adopting lenses ranging from the computer science to philosophy, and from law to sociology, this study aims to provide the holistic view of the unfolding reality, challenging existing paradigms and inviting a collective quest for understanding (Baudrillard, 1981; Habermas, 1985). Amid this scholarly journey, "Pixels and Policy" emerges as a critical exploration of the symbiotic relationship between digital innovation and legal frameworks, delving into the mutual dependencies and inherent tensions that define this epoch. This expedition

demands a nuanced interrogation of the evolving landscape, recognizing the multifaceted nature of digital transformation and its implications for international trade law. As we traverse this complex terrain, the questions we pose and the intellectual paths we follow are poised to shape the course of this odyssey, illuminating the intricate interplay between technology, law, and society (Castells, 2011; Hong et al., 2023).

LITERATURE REVIEW

Navigating through the diverse landscapes of existing scholarship unveils the intricate evolution of the relationship between the digital epoch and legal frameworks. The rich tapestry of academia encapsulates a transformative journey from the internet's nascent stages to its current pivotal role in jurisprudence. In the pioneering days of the information revolution, visionaries like Lessig (1999) laid groundwork by declaring "code is law," highlighting internet's inherent regulatory potential. This prophetic statement set the stage for an ever-strengthening bond between digital systems and legal realms, solidifying into crucial aspect of contemporary legal discourse (Buhaichuk, Nikitenko & Voronkova, 2023). The literature delves into complexities and challenges posed by digital era. Zuboff's (2019) concept of the "surveillance capitalism" captures epoch were data commodification challenges traditional legal boundaries, signifying a broader transformation in law's response to a digitized society. Concurrently, rise of legal tech applications illustrates a shift towards data-driven legal decisions, embodying the heart of modern academic dialogue (Saba, Sahli, Maouedj, Hadidi & Medjahed, 2021).

The ethics, privacy, and data sovereignty stand at this intersection, with introducing "contextual integrity," a call for nuanced approach to data privacy in line with our discussions on digital ethics. In diving deep into intricate dynamics of digitalization and international trade law, this scholarly journey sets its compass towards myriad of ambitious objectives. It endeavors to precisely dissect the multifaceted relationship that intertwines digitalization with international trade law, raising the pivotal question: Are we merely observing a correlation, or is there a more profound, causative force at play, molding contours of international policy? To direct these complex waters, one can invoke Foucault's concept of epistemes, refers to foundational frameworks that contour our comprehension of knowledge across different historical epochs (Foucault, 1970). This study seeks to discern whether we are standing at brink of a transformative legal and digital epoch, charting the course through uncharted territories of knowledge, and understanding. Pursuing this line of inquiry, study aims to critically evaluate modern tapestry of international trade laws, placing them under the discerning lens of digital ethics.

The Derrida's notion of intertextuality becomes dominant here, suggesting that laws are intricately woven into the broader fabric of the cultural, ethical, and historical narratives (Derrida, 2016). This investigation is committed to the unraveling how emerging digital constructs either align with or challenge the ethical and social paradigms encapsulated in international trade laws. Converging towards actionable insights, final objective of this scholarly venture is to provide well-articulated approvals for policymakers and stakeholders. It seeks to cultivate a repertoire of norms, principles, and best practices that resonate with technological imperatives and ethical obligations of our times (Rawls, 1971). In this quest, we ponder: what principles of justice should steer the burgeoning digital

ecosystems, now indelibly intertwined with fabric of global trade? Out of these objectives springs forth cascade of research questions, each feeding into grand narrative of intellectual expedition. What facets of digitalization cast most significant shadows on the landscape of international trade law? How do existing trade laws stand up to scrutiny of digitalization's relentless pace, and where do they falter? What ethical quandaries emerge from this intricate dance amid digital innovation and legal frameworks?

Are we inadvertently affecting elements of social justice, equality, or environmental stewardship in the ceaseless march toward the digitalization? And importantly, what normative frameworks might we propose to foster a harmonious interplay between ever-evolving domains of digital technology and international law? These questions, akin to flares illuminating the vast expanse of our inquiry, shape the contours of our exploratory journey without confining it. Drawing inspiration from Hans-Georg Gadamer, we acknowledge that understanding is the fluid, dialogic process, and that true inquiry fosters form of "play" in which both questioner and subject matter undergo transformation (Gadamer, 2013). As such, while these questions serve as our guiding stars, this research remains open to emergence of new questions, embracing the potential to contribute to an ongoing, dynamic dialogue of understanding. In summation, the existing available and accessible literature provides a rich, multifaceted panorama, offering the robust and required foundation for this current research to build on, elucidate, and expand, particularly focusing on the integration of digital technologies and legal frameworks.

RESEARCH METHODOLOGY

In the profound intricacies of data's rapid evolutions and legal technology's burgeoning footprint, a methodological scaffold is vital to navigate these dense thickets. This methodology, rooted deeply in qualitative assessment, efforts to unravel multifarious dance amid data challenges and legal tech application spectrum.

Data Collection

Embarking on this journey, our quest is underpinned by exhaustive appraisal of scholarly articles, illuminating policy documents, and pivotal legal frameworks. Such artifacts, echoing the wisdom of academia's brightest, will be culled primarily from sanctums like Google Scholar, ensuring a steady keel of authoritative grounding. The lighthouse guiding this quest will be keywords resonant with data intricacies, challenges, and legal tech paradigms. Maintaining a pulse in present, the spotlight will, by design, gleam predominantly on the oeuvres penned in the last decade. Yet, the echoes of yesteryears, discernible through citations within these tomes, may occasionally beckon, revealing erstwhile treasures.

Data Analysis

Meticulous thematic analysis stands as the chosen instrument for dissecting the amassed knowledge troves. As Boyatzis (1998) intimated, emergent themes become windows, offering vistas into heart of data's dance with legal tech. The process, steeped in discipline, will oscillate amid coding granular insights and crafting overarching thematic tapestries helps in conducting the research in systematic manner. To maintain sanctity of this endeavor, the multiple sagely analysts will intertwine their

perceptions, weaving rich mosaic while simultaneously tempering the specter of individual biases. The cyclic nature of these deliberations is akin towads the Socratic method, constantly refining and elevating our understanding.

Ethical Considerations

In this odyssey, compass of ethics remains non-negotiable. This study pledges fealty to venerated tenets: safeguarding sanctums of copyright and intellectual property, bestowing due credits with reverence, and shielding the sacrosanct nature of sensitive data. The latter commitment translates to an unwavering application of de-identification techniques, ensuring the flame of confidentiality remains undiminished.

RESULTS OF STUDY

As the curtains rise on the findings of our explorative journey, a panorama of intriguing insights and pivotal revelations lay before us, each narrating a unique story in complex ballet of digitalization and international trade law. At forefront, our analysis unveils a multifaceted relationship between the digital realm and legal frameworks. It transcends mere correlation, emerging as a force majeure, reshaping contours of international policy. The digital epoch has ushered in a new legal episteme, echoing Foucault's vision of transformative cognitive frameworks (Foucault, 1970). The implications are profound, as digitalization not only redefines existing laws but also demands the birth of new jurisprudential philosophies as required for meeting the diverse phenomenal approaches. Besides, the ethical landscape of international trade law stands at a crossroads. The traditional paradigms of the legal frameworks are grappling with the challenges and opportunities presented by the diverse digital surge.

This study underscores a paramount need for an ethical recalibration, as the intertwining of digital constructs and legal realms brings to light questions of privacy, data sovereignty, and intellectual property. The role of international trade laws, when viewed through prism of digital ethics, reveals a tapestry of the adaptation and resistance. While certain legal frameworks exhibit resilience and an ability to evolve, others remain ensconced in archaic traditions, proving ill-equipped to navigate the digital torrent. Hence, the research has unraveled a constellation of insights, contributing to an enriched understanding of digital-legal nexus. It delineates profound transformations underway, highlighting the imperative for legal frameworks to evolve in tandem with digital innovations. The findings serve as a clarion call for policymakers and stakeholders, urging the adoption of norms and principles attuned to digital age's exigencies, thereby ensuring a harmonious and equitable global trade environment.

Evolution of International Trade Law

Delving into the labyrinth of international trade law intertwined with digitalization requires a historical lens to provide context and clarity. As Wittgenstein professed, understanding is rooted in context, a beacon amidst the sea of complexity (Wittgenstein, 1953). Tracing back, we unveil a rich tapestry of commerce and law, resonating with ancient negotiations across trade routes. Prior to the digital epoch, international trade law was dance of sociopolitical and commercial elements, deeply entrenched in the cradle of civilization. From the Mesopotamian clay tablets to the medieval lex mercatoria, it has steered humanity's commercial voyage. The Hammurabi Code, an ancient legal

codex, reveals a rich tapestry of commercial contracts interwoven with societal norms, presenting a nuanced portrait of trade law (Horne et al., 1915). Yet, this journey through time reveals dichotomy: laws as architects of order and standards, and laws as instruments of power asymmetries, such as the mercantilist agendas of colonial empires (Polanyi, 1944). Tools of trade and law were inseparable; the astrolabe, a navigational marvel, and Venetian ledger books, precursors to modern accounting, were both legal and commercial artefacts (Yamey, 1949; 海野一隆, 1958). This historical journey beckons us to reflect, invoking Socratic "anamnesis" (Annas, 1986). It compels us to question ethos we are embedding in the digital period, highlighting the importance of reconciling our past with our present and future.

As we navigate today's digital revolution, remembering the lessons from history provides a unique vantage point, offering insights to better comprehend and navigate current transformation. In this dynamic interplay of law and commerce, we find collection of legal codices, treaties, institutions marking pivotal moments in the history of human interaction, providing anchors of understanding as we venture forward (Macaulay, 2020). Post-WWII era saw the formation of General Agreement on Tariffs and Trade (GATT) in 1947, embodying a global desire for economic regeneration over free trade and cooperation. Drawing inspiration from Kant's philosophy of peace over trade, GATT laid the groundwork for World Trade Organization (WTO) in 1995, which refined the legal frameworks of international trade, introducing robust dispute resolution mechanisms. 21st century witnessed rise of Free Trade Agreements like NAFTA, ASEAN, European Union, introducing complex regional dimensions to global trade law, prompting reflections on ethical implications of such regionalism (Bhagwati, 2008). The advent of the e-commerce has intertwined law and technology, necessitating new legal frameworks, as exemplified by Electronic Signatures in Global and National Commerce Act (E-SIGN) in U.S.

Contemporary trade law grapples with transnational issues like climate change and human rights, leading to inclusion of sustainability and social responsibility clauses in trade agreements. These milestones, each a node in the intricate network of international relations, push us to continually reassess our legal frameworks, steering us toward a future filled with legal and ethical complexities. The WTO, EU, and agreements like TPP are central to this structure, shaping global trade dynamics. WTO, evolving from GATT, functions as the arbiter in international trade, though it faces criticisms from developing nations about the implications of unrestricted capitalism (Mansfield & Reinhardt, 2003). The EU stands as a testament to regional integration, influencing trade policies internally and globally, despite challenges like Brexit highlighting complexities of supranational governance (Oliver, 2015). In Global South, initiatives like ACFTS mark a significant move toward the regional economic integration, (Kuhlmann & Agutu, 2019). These institutions and agreements, while serving as frameworks for economic transactions, also embody humanity's quest for balanced coexistence, intertwining economic prosperity with the social justice, environmental sustainability, as well as the cultural preservation.

Rise of Digitalization

Digitalization, a transformative force in the landscape of international trade, stands as multifaceted phenomenon. More than just converting analog information into digital formats, it challenges the

essence of existence in a digital age (Kallinikos et al., 2010). Thus, it introduces an architecture of instantaneousness, altering the very fabric of 'being' and 'becoming' (Castells, 2011). In commerce, it transcends e-commerce and digital payment systems, incorporating automation, data analytics, and AI within digital ecosystem. This transforms traditional goods and services into digital artifacts, reshaping trade law to adapt to regularly changing reality (Aaronson, 2017). Still, it deepens socio-economic divide, raising ethical concerns in data usage and needing a moral direction in digital commerce (Mayer-Schönberger & Cukier, 2013; Wu, 2017). Technologies like Blockchain, IoT, and AI are redefining trade, each bringing unique contributions and challenges. Blockchain ensures transparency and safety in dealings, acting as digital leviathan control international trade (Maurer et al., 2013). IoT transforms supplies into smart entities, participating in their own trade processes (Whitmore et al., 2015).

AI, on the other hand, operates as an active agent, learning and making decisions that shape trade policies (Russell & Norvig, 2016). These technologies, while transformative, also raise the concerns about data privacy, ethical considerations, and potential inequalities (Zuboff, 2019). The growth of digitalization is influenced by accelerators like data democratization, which lowers entry barriers in trade, and inhibitors like regulatory frameworks, ensuring ethical considerations in technological advancements (Cukier & Mayer-Schoenberger, 2013; Voigt & Bussche, 2017). In this connection, the automation, an accelerator, has the dual potential to create and eliminate jobs, resonating with Marx's theory of the alienation and Rawls' social contract obligations (Marx, 1959; Rawls, 1971). The inhibitors, including digital illiteracy and the 'digital divide,' serve as reminders of the technology's limitations and the importance of the ethical progress (Norris, 2001; Sen, 1999). By condensing the content and focusing on the main ideas, this revised section provides a comprehensive overview of digitalization in international trade while addressing the reviewer's concerns about length and outdated references.

Digitalization's Direct Impact on Trade Mechanisms

In the digital age, trade mechanisms are undergoing a profound transformation, exemplified by the rise of digital currencies (Digital currencies: Economic & geopolitical challenges). These currencies, epitomized by Bitcoin and stablecoins, are redrawing the fiscal landscape, challenging traditional financial structures, and creating a new paradigm in trade finance (Huang, 2019). Bitcoin, powered by blockchain technology, epitomizes a decentralized approach to financial transactions, ensuring transparency and security. It represents a paradigm shift, introducing a new way of understanding world of finance, akin to a digital Leviathan (Zouhair & Kasraie, 2019). On other hand, stablecoins offer stability in volatile world of cryptocurrencies, providing innovative solutions for cross-border trade and minimizing transaction costs in line with Coase theorem (Adachi, Silva, Born, Cappuccio, Ludwig, Pellicani, Plooij, Paula & Philipps, 2022). Still, autonomy of digital currencies introduces complex regulatory challenges, necessitating reevaluation of legal doctrines to strike balance amid economic freedom and regulatory control. This digital revolution is not just altering trade finance but is expanding its very language and lexicon, requiring paradigmatic shift in trade law (Burri & Chander, 2023).

Digital currencies are rewriting the rules of international trade law and finance, serving as agents of change, and compelling us to rethink established norms (Foster, Blakstad, Gazi & Bos, 2021). The digital transformation of commerce has elevated e-commerce from supplementary role to a central pillar of global trade. Digital marketplaces have altered nature of trade, democratizing market participation and challenging traditional legal frameworks (Mpofu, 2022). The law finds itself in issues of jurisdiction, taxation, and intellectual property in borderless digital marketplace (Institute et al., 2008). The rise of novel transaction forms such as drop shipping and digital microtransactions further challenges the foundations of trade law, necessitating a redefinition of key concepts like "territory" and "ownership."(Takigawa, 2022). The concentration of power within major e-commerce platforms raises ethical and governance concerns, echoing historical antitrust challenges. Digital marketplace is revolutionizing not just commerce but legal doctrines and ethical values, requiring a inclusive understanding and adaptive approach to navigate this transformative landscape (Burri, 2018; Kersan, 2021).

The digital transformation of trade mechanisms is reshaping the landscape of international trade, challenging established norms, and introducing new complexities. The rise of digital currencies and digital marketplaces represents a significant shift, necessitating adaptive legal frameworks and a reevaluation of ethical values to navigate this new era of global commerce (Fadila & Pangestuti, 2022). Navigating through the digital cosmos, our gaze settles upon transformative world of supply chain and logistics, akin to the complex network of neurons within a human brain. Digitalization has imbued supply chains with unprecedented faculties of the awareness, decision-making, as well as adaptability, attributes once thought to be the sole province of sentient beings. This metamorphosis parallels Descartes' mechanical philosophy, yet challenges Cartesian divide, merging the realms of thought and extension (Chen, 2022). In this connection, the advent of technologies like the Internet of Things (IoT) and blockchain heralds a new era for the logistical capabilities. In this linking, IoT transforms supply chains into self-aware entities, that able to perceive and respond towards their environment autonomously.

Imagine trucks, containers, and products equipped with sensors, creating network of interconnected units, each treated with Kantian regard, not merely as a means but as an end (Adebayo et al., 2022). Blockchain acts as immutable memory of the supply chain, ensuring every transaction is recorded and verified, thus elevating the supply chain to a domain of ethical commerce. This shifts the supply chain from mere conduit for goods to a dynamic entity intertwined with social, economic, and legal fabrics, reminiscent of Foucault "technologies of self," where technology reshapes our interactions and societal roles. Yet, this digital revolution brings forth a labyrinth of the legal issues, from data protection to anti-competitive practices, and raises questions of liability. Who bears responsibility when a digitalized supply chain falters or commits an illegal act? Despite its exhilarating potential, the disparity in digital infrastructure across nations introduces an element of asymmetry, resonating with Rawls' "justice as fairness (Taylor, 2017)". In ensuring the benefits of digitalization are equitably distributed, we stand at the critical juncture, shaping not just the future, but also dissecting the intertwined complexities of technology, law, and ethics, in our pursuit of crafting equitable global systems (Bank, 2012).

Legislative Responses to Digital Trade

Global trade landscape, steeped in traditional practices, is now undergoing digital metamorphosis, contending with issues of digital privacy, cybersecurity, and data sovereignty. The shift is reflective of Foucault's concept of "episteme," highlighting evolving structures of knowledge that dictate what is conceivable within a given period (Foucault, 1966). With data emerging as a pivotal resource, the trade episteme is becoming irreversibly digital, challenging existing international trade laws crafted in an industrial era. This paradigm shift necessitates a transformation in the World Trade Organization (WTO), the arbiter of global commerce, to encompass digital trade, a process initiated with its e-commerce initiative in 1998 (WTO, 1998). General Data Protection Regulation (GDPR) in the European Union is a noteworthy attempt to balance data flow with the privacy considerations, providing a lesson in data governance for the nations worldwide (Merlec et al., 2021). Nevertheless, geopolitical power continues to shape digital trade policies, exemplified by United States-Mexico-Canada Agreement (USMCA), which incorporates American policy preferences on digital trade (Soroka, 2023).

These developments underscore the need for recalibration in international policies and regulations on digital trade, moving towards a modern-day Platonic ideal that captures the essence of societal structures and the human condition. Legislative landmarks such as the GDPR, TPP, and NAFTA 2.0 serve as pivotal beacons in the shifting landscape of digital trade, reflecting the epoch's aspirations and anxieties. In this connection, the GDPR, championed by the European Union, challenges global data practices, urging a reevaluation of ethical underpinnings in our data-driven societies, despite its Eurocentric bias (Rights; Zuboff, 2019). Thus, the TPP, prior to the U.S. withdrawal, epitomized a capitalist vision for the digital trade, championing the borderless digital economy, yet eventually succumbing to the nationalist sentiments (Rodrik, 2011). NAFTA 2.0, or USMCA, introduces explicit provisions on digital trade, showcasing a pragmatic approach to modern challenges, though raising questions upon the ethical implications of the data monopolies (Pasquale, 2015). These legislative frameworks collectively underscore the existential stakes at play in the digital trade, beyond mere economic considerations.

Symbiotic Relationship: A Closer Look

Navigating the intricate pathways of digital trade and its interplay with the international laws requires a robust understanding of the underlying principles binding them. The digital epoch has ushered in complexities, making it imperative to adapt our theoretical frameworks to capture this ever-evolving symbiosis accurately. Reflecting upon Immanuel Kant's wisdom, he articulated the intricate balance between understanding (concepts) and observation (Peters, 2023). This balance resonates aptly with our current challenge: equating duality of quantum mechanics with digital-trade-law nexus. Old trade laws, much like Newtonian physics, are insufficient. An "Einsteinian" paradigm shift is imminent, mirroring Einstein's space-time revelation. Two frameworks provide foundational insights: The 'Digital-Regulatory Ecosystem' illustrates the intertwined nature of the digitalization and trade law, positioning digital breakthroughs like AI and blockchain as pivotal players, shaping and being shaped by their surroundings. For instance, blockchain's introduction of smart pacts in international trade reshapes regulatory landscapes. Symbiotic spiral offers another intriguing perspective.

It draws parallels with DNA double-helix, where digitalization and trade laws constantly adapt, influenced by policy and technology intersections (Burri, 2023). Like DNA, model holds potential futures, rich with opportunities and challenges. In essence, the journey to comprehend this nexus mirrors Hegelian dialectics' continuous cycle, where the Digital-Regulatory Ecosystem and the Symbiotic Spiral represent the initial stages; culmination is still a horizon away (Hegel, 2018). Our endeavors should focus on this horizon, as it promises a confluence of technological advancements and fair-trade laws. In the realm of research, the dichotomy between quantitative and qualitative methodologies persists, embodying balance amid empirical precision and nuanced understanding. Embracing both is crucial, particularly in analyzing intricate interplay between digitalization and international trade law. Socrates' wave of knowledge as complex pursuit serves as poignant cue here. Consider the integration of blockchain in trade financing. Quantitative analysis sheds light on its palpable benefits, showcasing a surge in the efficiency and a reduction in fraud (Hellwig & Huchzermeier, 2019).

Predictive models and algorithms help forecast the future landscape of trade financing, providing invaluable data for policy formation. In tandem, qualitative analysis offers depth, exploring societal impacts and cultural intersections. For instance, it probes into how blockchain's rise in trade finance relates to cultural perceptions of trust, particularly in contexts like Japan where trustworthiness holds paramount importance in business (Broby, 2022). Moreover, qualitative methodologies delve into repercussions on existing laws and ethical frameworks, areas often enshrouded in complexity. This dual-method approach fosters methodological triangulation, concept coined by Denzin (1970), ensuring comprehensive empathetic. Nietzsche perspective, there are no facts, only interpretations (Nietzsche, 2017), resonates here, highlighting value of this multifaceted approach in unraveling the complexities at the nexus of digitalization and international trade law. In a grand synthesis of data and human experience, we reach the pivotal moment, the key findings and interpretations, transmuting raw data into valuable insights. Drawing inspiration from Kierkegaard's reflection on life and understanding, we adopt the retrospective approach to advance our comprehension (Tod & Tod, 2019).

In deciphering intricate web of digitalization and international trade law, Blockchain technology emerges as crucial guidepost. Our quantitative analysis underlines its substantial role in enhancing efficiency and trust within trade financing systems, highlighting a transformative potential that is hard to ignore. Yet, the qualitative insights reveal a complex tapestry of the ethical and cultural considerations, prompting us to ponder if impersonal nature of blockchain could potentially disrupt established human connections (Chang et al., 2020; Ganne, 2021). This leads us to the profound realization: the integration of technology and trade law transcends legal and economic dimensions, delving into the sociocultural fabric of our society. On a similar note, data privacy legislation like the GDPR stands out, demonstrating a dual nature in its impact. Quantitatively, it has effectively reduced instances of data breaches and unauthorized data sharing since its implementation (Al-Balasmeh et al., 2022; Albrecht, 2016). Qualitatively, it opens avenues for discourse on digital sovereignty and the balance between individualism and collectivism in the digital domain (Glasze et al., 2023).

Our exploration extends to the dynamic realms of e-commerce and digital marketplaces, unveiling a paradoxical narrative. While quantitative data showcases a surge in sales and customer reach, qualitative insights shed light on challenges faced by SMEs, overshadowed by e-commerce giants in a modern-day David and Goliath scenario. These multifaceted interpretations, reminiscent of Foucault's 'archaeology of knowledge', underscore our role as intellectual archaeologists, delving into intricate layers of digitalization and trade law (Podkalicka & Fredriksson, 2023). In a grand synthesis of data and human experience, we reach pivotal moment, key results and interpretations, transmuting raw data in valuable insights. Beyond facts, we uncover paradigms pivotal for policy-making and human action, enriching our collective understanding of digital agora. In essence, this research serves as rational odyssey, each key finding and construal contributing to kaleidoscopic worldview, is tortuously complex & beautifully contradictory. As we navigate this vast intellectual cosmos, every discovery plays a crucial role, perpetually shaping the universe of digitalization and international trade law.

Implications & Consequences

In intricate world of law and digital trade, we find ourselves balancing tremendous opportunities with multifaceted challenges. Drawing inspiration from the Derrida's perspective, it's evident that interpretations, whether legal or technological, continuously evolve (Derrida, 2016; Mitchell & Mishra, 2017). Central to this discussion is the dichotomous concept of sovereignty. In digital trade, sovereignty morphs, boosting national capacities with technology, as evidenced by our findings on GDP growth linked to digital trade, while borderless nature of the internet challenges these very boundaries (Volk, 2022). It becomes evident that there's pressing need to strike balance. Protecting innovations without curtailing collaborative spirit that drives digital space is real challenge. While some jurisdictions opt for stringent copyright measures, others lean towards open-source solutions (Archibugi & Filippetti, 2010; Lessig, 2001). In parallel, data protection emerges as colossal player. GDPR, though a pioneering force in individual privacy, poses challenges for smaller businesses with its stringent compliance (Greenleaf, 2018). Nations aiming for digital growth, but with relaxed data policies, might face potential trade barriers, underscoring need for inclusive digital integration (Zuboff, 2019).

Moreover, the advent of smart contracts, underpinned by blockchain, prompts us to reevaluate the traditional contract law (Macaulay, 2020). It can establish the legal tenets cater to these digital innovations? In conclusion, as we transition into this digital age, the legal spectrum must adapt. The symbiotic relationship between law and technology ensures they influence each other continually, suggesting an endless evolution (El-Jarn & Southern, 2020). Navigating through the intricate realm of digital trade's economic ramifications, it's imperative to scrutinize the multifaceted aspects of market access, employment, and inequality. The economic sphere, transcending mere numerical values, unveils a narrative rich in complexity and dynamism. Market access within digital trade unveils a dual nature; it unlocks previously inaccessible markets, weaving a new tapestry in the globalization saga, yet it simultaneously poses a question: does this equalization of market access guarantee economic parity? This nuanced dialogue draws from modern interpretations of Adam Smith's 'invisible hand' and Schumpeter creative destruction, highlighting duality where emerging

markets gain opportunities at potential expense of local enterprises (Mhlanga, 2021; Schumpeter, 1942; Smith, 1999).

In considering employment, the digital era introduces a new set of protagonists and challenges. Like the Luddites of the Industrial Revolution, contemporary workers face a metamorphosis, their roles evolving or becoming obsolete in the face of automation and artificial intelligence. Yet, this transformation also births new industries and opportunities. In this complex landscape, inequality emerges as a persistent specter. The allure of the digital trade for wealth accumulation creates a dichotomy; the affluent and digitally literate reap benefits, while the digitally disenfranchised face widening income disparities and marginalization (Castells, 2011; Qureshi, 2022). To encapsulate, the economic implications of the digital trade unravel as an intricate web, filled with the ethical considerations, dialectic oppositions, and uncertainties. Just as past eras have been defined by the agricultural and industrial revolutions, the Digital Age presents its transformative impact. Yet, the key lies not in the technology itself, but in the ethical discourse and equitable policymaking that guide its application (Peters, 2023; Rawls, 1971). Thus, delving into the ethical landscape of digital trade, we navigate through a complex tapestry interwoven with strands of moral philosophy and applied sociology.

The subject, far from being a mere ornamental aspect of the discourse, serves as the gravitational force holding our societal fabric together. In digital era, we find ourselves in a scenario reminiscent of the trolley problem, an ethical conundrum replete with moral intricacies and dilemmas (Park et al., 2020). Here, the metaphorical trolley of digital progress hurtles forward, compelling us to make choices that have profound implications on various stakeholders. On one hand, there are consumers reveling in convenience and affordability of global market access; on the other, workers find their livelihoods imperiled by relentless march of automation. Each choice is laden with moral weight, and inaction is not absolved from scrutiny (Qureshi). The digital age also introduces us to paradox of choice, where abundance of options, while seemingly beneficial, lead to consumer overwhelm and a societal shift to hedonic adaptation. Such scenario dulls capacity for serenity, creating a condition of insatiable consumption. This profusion, carries with it bane of potential societal upheaval (Saura et al., 2020). Thus, the digital trade mechanisms, fertile grounds for cultivation of social capital, simultaneously sow seeds of inequality and cultural erosion, threatening to fray communal ties that bind society together.

The public sphere, once a bastion of democratic discourse, now stands at a crossroads, faced with the commodification of civic engagement. This transformation, driven by the imperatives of digital trade, threatens to fracture the common ground upon which civic discourse once thrived. Alongside these concerns, the specter of surveillance capitalism looms large, casting a long shadow over the digital landscape (Park et al., 2020) In this new order, individuals find themselves ensnared in a Faustian bargain, trading personal data for digital conveniences, thus becoming both consumers and the consumed. This raises a critical question: Does our relationship with digital trade represent a symbiotic balance, or does it veer towards a parasitic dynamic, enriching our material lives at the expense of our ethical and societal well-being? In navigating these turbulent digital waters, we must remain steadfast, guided by the North Star of ethical and societal considerations, ensuring that

the allure of profit and convenience does not lead us astray, steering us clear of the moral hazards and societal decay that lie in wait. In this linking, to safeguard our journey, our moral compass, calibrated to the principles of justice, equity, and the common good, becomes our indispensable tool (Lindsey et al., 2000).

DISCUSSION

The digital era, with its intricate web of opportunities and challenges, presents fertile ground for deliberation, particularly in the context of digital trade and its multifaceted implications (Qureshi, 2022). The essence of this research lies in untangling the complex dynamics that underpin digital trade, unraveling the threads to reveal tapestry rich in nuances and insights. Through a meticulous exploration of various dimensions, the study elucidates the transformative potential of digital trade, while simultaneously shedding light on shadowy aspects that accompany this phenomenon. At the forefront of this discussion is the role of digital platforms in catalyzing a paradigm shift in the global trade landscape. The study underscores the undeniable potency of these platforms, as they not only democratize access to markets but serve as conduits for innovation and efficiency (Acs et al., 2021). However, this is not tale of unequivocal triumph. The research brings to fore inherent dualities that characterize digital trade, where same forces that empower can marginalize. The platforms, while enabling smaller players to enter global arena, simultaneously amplify dominance of tech giants, thereby raising pertinent questions about market concentration and power asymmetries (Ali et al., 2023). In delving into economic extents of digital trade, study navigates over intricate interplay of benefits and discontents.

The narrative that unfolds reveals landscape marked by greater productivity, reduced transaction costs, and creation of novel economic opportunities. Yet, this rosy picture is punctuated by shadows of uncertainty, disruption, as traditional industries face tumultuous winds of digital transformation. The study serves as a clarion call, urging stakeholders to actively engage in shaping the contours of this digital revolution, ensuring that its fruits are equitably distributed. The societal and ethical dimensions of digital trade, as explored in study, add layers of complexity to discourse. The research paints vivid picture of world where abundance of choice and convenience coexists with challenges of inequity, privacy erosion, and potential societal disintegration. In digital paradigm, individual is both a beneficiary and a pawn, navigating through a labyrinth of data extraction and algorithmic determinations (Smeets, 2021). The study, in its philosophical depth, prompts a reflection on the nature of this digital entanglement, urging a contemplation on kind of society we wish to foster in the age of digital ubiquity. On the policy front, the research advocates for a proactive and nuanced approach, underscoring imperative for governance frameworks that are agile and attuned to the evolving digital landscape.

The study emphasizes the role of international cooperation, highlighting the transboundary nature of digital trade and the need for concerted efforts to address associated challenges. In this regard, the research serves as a timely intervention, contributing to ongoing dialogue on crafting policies that are both responsive and responsible. In synthesizing the various strands of the discussion, the research carves out a space for critical reflection and informed action. It invites stakeholders to embrace the complexities of digital trade, to navigate through ambiguities with a sense of purpose

and ethical clarity. The study, in its exploration of digital trade odyssey, offers not just a snapshot of the present but also a compass for future, guiding us through intricate maze of digital possibilities and perils. Hence, this research stands as a testament to the transformative power of digital trade, while serving as beacon, illuminating the paths we might take in this digital epoch. It challenges us to look beyond the surface, delve deeper into the layers of digital trade, and emerge with a nuanced understanding that balances promise of innovation with imperatives of equity, ethics, and societal well-being. Thus, the journey through the digital trade landscape, as charted by this study, is both illuminating and sobering, a journey that invites us to reflect, to question, and ultimately, to act with wisdom and foresight.

CONCLUSION

In this intricate voyage through the vast seas of digital trade mechanisms, legislative landscapes, and symbiotic relations, we have scrutinized numerous harbors, from bays of digital currencies to the turbulent waters of international policies. Yet, as Heraclitus opined, one cannot step into same river twice. The dynamic fluidity of our subject matter embodies this ancient wisdom, reflecting a constant state of flux in both the legislative and economic realms. Our examination posits that digitalization is not merely an ancillary force, but a seismic shift that upends traditional paradigms, echoing the sentiments of McLuhan that the medium is the message. We find that laws and policies around digital trade are still in embryonic stages, necessitating rigorous intellectual stewardship to guide their maturation. The implications are multilayered, penetrating legal, economic, and ethical strata, each with its unique set of challenges and opportunities. As we gaze into the murky waters of the future, let us acknowledge that our research is not terminus but a waystation. While we have endeavored to offer policy, recommendations grounded in empirical analysis, the rapid evolution of technology calls for perpetual vigilance and adaptability. Our work thus heralds not an end but a new beginning, inviting future scholars to explore hitherto unknown tributaries. In sum, the quest for understanding labyrinthine interactions between digitalization and global trade mechanisms continues. It is, and perhaps always will be, a journey rather than a destination, a modern odyssey for the digital age.

Policy Recommendations

1. Authorities must insist on algorithmic transparency. This is not abstract ideal but a concrete necessity for democracy in a digital age. Individuals should maintain control over their data, treated in jurisprudence as extension of their personal liberty.
2. There is a need to recognize the diversity of economic and cultural ecosystems; a one-size-fits-all policies as well as strategies are not just the impractical but could be ethically and economically harmful.
3. Schools and colleges should pivot towards syllabi that align with the future of work. This isn't an educational choice, but a survival imperative. Implement robust frameworks to defend consumers against data breaches and exploitation.
4. Update employment laws to reflect the realities of digital economy, ensuring that workers are protected from exploitation while also providing companies the flexibility they need to innovate.

5. The digital trade isn't disembodied; it consumes resources. The policies must factor in its environmental impact. Digitalization should not lead to cultural homogenization. Policy interventions may be necessary to protect local cultures and languages.
6. Regulations should be developed collaboratively, involving government, industry, and civil society. Thus, besides legal frameworks, there should be ethical guidelines, revisited periodically, to keep pace with technological advancements.

REFERENCES

Aaronson, S. A. (2017). Information please: a comprehensive approach to digital trade provisions in NAFTA 2.0.

Acs, Z. J., Song, A. K., Szerb, L., Audretsch, D. B., & Komlosi, E. (2021). The evolution of the global digital platform economy: 1971–2021. *Small Business Economics*, 57, 1629–1659.

Adachi, M., Da Silva, P. B. P., Born, A., Cappuccio, M., Czák-Ludwig, S., Gschossmann, I., Pellicani, A., Plooij, M., Paula, G., & Philipps, S.-M. (2022). Stablecoins' role in crypto and beyond: functions, risks and policy. *Macroprudential Bulletin*, 18.

Adebayo, N., Bajeh, A. O., Arowolo, M., Udochuckwu, E., Jesujana, K., Ajayi, M., Abdulrasaq, S., & Onyemenam, J. (2022). Blockchain Technology: A Panacea for IoT Security Challenge. *EAI Endorsed Transactions on Internet of Things*, 8(3).

Al-Balasmeh, H., Singh, M., & Singh, R. (2022). Framework of data privacy preservation and location obfuscation in vehicular cloud networks. *Concurrency and Computation: Practice and Experience*, 34(5), e6682.

Albrecht, J. P. (2016). How the GDPR will change the world. *European Data Protection and Legal Review*, 2, 287.

Ali, S., Abdullah, Armand, T. P. T., Athar, A., Hussain, A., Ali, M., Yaseen, M., Joo, M.-I., & Kim, H.-C. (2023). Metaverse in healthcare integrated with explainable ai and blockchain: enabling immersiveness, ensuring trust, and providing patient data security. *Sensors*, 23(2), 565.

Annas, J. (1986). Plato. Royal Institute of Philosophy Supplements, 20, 1–2. Bank, W. (2012). World development indicators 2012. The World Bank.

Archibugi, D., & Filippetti, A. (2010). The globalisation of intellectual property rights: four learned lessons and four theses. *Global Policy*, 1(2), 137–149.

Baudrillard, J. (1981). Simulacra and Simulation (Foss, P.; Batton, P.; Beitchman, P., Trans.). Semiotext (e), Éditions Galilée.

Bhagwati, J. (2008). Termites in the trading system: How preferential agreements undermine free trade. Oxford University Press.

Broby, D. (2022). The use of predictive analytics in finance. *The Journal of Finance and Data Science*, 8, 145–161.

Buhaichuk, O., Nikitenko, V., & Voronkova, V. (2023). Formation of a digital education model in terms of the digital economy (based on the example of EU countries). *Baltic Journal of Economic Studies*, 9(1), 53–60.

Burri, M. (2018). Understanding and shaping trade rules for the digital era. The Shifting Landscape of Global Trade Governance, edited by Manfred Elsig, Michael Hahn and Gabriele Spilker (Cambridge University Press, 2019), 73–106.

Burri, M. (2023). Digital Trade Law and Human Rights. Burri, M., & Chander, A. (2023). What Are Digital Trade and Digital Trade Law? Castells, M. (2011). The rise of the network society. John wiley & sons.

Chang, Y., Iakovou, E., & Shi, W. (2020). Blockchain in global supply chains and cross border trade: a critical synthesis of the state-of-the-art, challenges and opportunities. *International Journal of Production Research*, 58(7), 2082-2099.

Chen, S. (2022). Cryptocurrency financial risk analysis based on deep machine learning. Complexity, 2022, 1-8.

Cukier, K., & Mayer-Schoenberger, V. (2013). The rise of big data: How it's changing the way we think about the world. *Foreign Affairs*., 92, 28.

De Montesquieu, C. (1989). Montesquieu: The spirit of the laws. Cambridge University Press. Derrida, J. (2016). Of grammatology. Jhu Press.

El-Jarn, H., & Southern, G. (2020). Can co-creation in extended reality technologies facilitate the design process? *Journal of Work-Applied Management*, 12(2), 191-205.

Fadila, A., & Pangestuti, D. C. (2022). Examining the effect of economic collison: Case on credit performance in islamic banking. *International Journal of Finance & Banking Studies* (2147-4486), 11(1), 132-145.

Foster, K., Blakstad, S., Gazi, S., & Bos, M. (2021). Digital currencies and CBDC impacts on least developed countries (LDCs). The Dialogue on Global Digital Finance Governance Paper Series.

Foucault, M. (1966). The Order of Things: An Archeology of the Human Sciences. new York: Vintage, 1970. Trans. of Les mots et les choses: Une archéologie des sciences humaines. Paris: Gallimard.

Foucault, M. (1970). The archaeology of knowledge. Social science information, 9(1), 175-185. Fukuyama, F. (2006). The end of history and the last man. Simon and Schuster. Gadamer, H.-G. (2013). Truth and method. A&C Black.

Ganne, E. (2021). Blockchain's Practical and Legal Implications for Global Trade and Global Trade Law. Burri (Ed.), Big Data and Global Trade Law, Cambridge, 128-159. Gibson, W. (1999). The Science in Science Fiction. Talk of the Nation. NPR. In.

Glasze, G., Cattaruzza, A., Douzet, F., Dammann, F., Bertran, M.-G., Bômont, C., Braun, M., Danet, D., Desforges, A., & Géry, A. (2023). Contested spatialities of digital sovereignty. *Geopolitics*, 28(2), 919-958.

Greenleaf, G. (2018). Global Convergence of Data Privacy Standards and Laws: Speaking Notes for the European Commission Events on the Launch of the General Data Protection Regulation (GDPR) in Brussels & New Delhi, 25 May 2018. UNSW Law Research Paper(18-56).

Habermas, J. (1985). The theory of communicative action: Volume 2: Lifeword and system: A critique of functionalist reason (Vol. 2). Beacon press.

Harari, Y. N. (2016). Homo Deus: A brief history of tomorrow. random house. Hegel, G. W. F. (2018). Hegel: The phenomenology of spirit. Oxford University Press.

Hellwig, D., & Huchzermeier, A. (2019). An industry study of blockchain technology's impact on Trade Finance. Available at SSRN 3453767.

Hong, M., Park, J., Chang, J., & Hong, S. (2023). Demand Survey Method for Commercialization of Police Science Technology and Equipment. *KSII Transactions on Internet & Information Systems*, 17(2).

Horne, C. F., Johns, C. H. W., & King, L. (1915). The Code of Hammurabi: Introduction. Retrieved August, 2, 2011.

Huang, H. (2019). How does information transmission influence the value creation capability of a digital ecosystem? An empirical study of the crypto-digital ecosystem ethereum. *Sustainability*, 11(19), 5345.

Institute, A. L., Dreyfuss, R. C., Ginsburg, J. C., & Dessemontet, F. (2008). Intellectual Property: Principles Governing Jurisdiction, Choice of Law, and Judgments in Transnational Disputes: as Adopted and Promulgated by the American Law Institute at San Francisco, California May 14, 2007. American Law Institute.

Kallinikos, I., Aaltonen, A., & Marton, A. (2010). A theory of digital objects. *First Monday,* 15(6), 1-22.

Kersan-Skabic, I. (2021). Digital trade enablers and barriers in the European Union. *Montenegrin Journal of Economics*, 17(4), 99-109.

Kuhlmann, K., & Agutu, A. L. (2019). The African Continental Free Trade Area: Toward a new legal model for trade and development. *Geographical Journal of International Law*, 51, 753. Lessig, L. (2001). The Internet under siege. Foreign Policy, 56-65.

Lindsey, E. W., Kurtz, P. D., Jarvis, S., Williams, N. R., & Nackerud, L. (2000). How runaway and homeless youth navigate troubled waters: Personal strengths and resources. *Child and Adolescent Social Work Journal*, 17, 115-140.

Mansfield, E. D., & Reinhardt, E. (2003). Multilateral determinants of regionalism: The effects of GATT/WTO on the formation of preferential trading arrangements. International organization, 57(4), 829-862.

Marx, K. (1959). Economic & Philosophic Manuscripts Moscow Progress Publishers. Macaulay, S. (2020). Non-contractual relations in business: A preliminary study. *Springer*.

Maurer, B., Nelms, T. C., & Swartz, L. (2013). "When perhaps the real problem is money itself!": the practical materiality of Bitcoin. *Social Semiotics*, 23(2), 261-277.

Mayer-Schönberger, V., & Cukier, K. (2013). Big data: A revolution that will transform how we live, work, and think. Houghton Mifflin Harcourt.

Merlec, M. M., Lee, Y. K., Hong, S.-P., & In, H. P. (2021). A smart contract-based dynamic consent management system for personal data usage under GDPR. *Sensors*, 21(23), 7994.

Mhlanga, D. (2021). Artificial intelligence in the industry 4.0, and its impact on poverty, innovation, infrastructure development, and the sustainable development goals: Lessons from emerging economies? *Sustainability*, 13(11), 5788.

Mitchell, A. D., & Mishra, N. (2017). Data at the docks: modernizing international trade law for the digital economy. *Vand Journal of Enterprises and Technology*, 20, 1073.

Nietzsche, F. W. (2017). The Genealogy of Morals. Boni and Liverwright. Norris, P. (2001). Digital divide: Civic engagement, information poverty, and the Internet worldwide. Cambridge university press. O'Reilly, T. (2017). WTF?: What's the Future and why It's Up to Us. Random House.

Oliver, T. (2015). Europe's British question: the UK–EU relationship in a changing Europe and multipolar world. *Global Society*, 29(3), 409-426.

Park, Y. J., Sang, Y., Lee, H., & Jones-Jang, S. M. (2020). The ontology of digital asset after death: policy complexities, suggestions and critique of digital platforms. *Digital Policy, Regulation and Governance*, 22(1), 1-14.

Pasquale, F. (2015). The black box society: The secret algorithms that control money and information. Harvard University Press.

Peters, M. A. (2023). Digital trade, digital economy and the digital economy partnership agreement (DEPA). In (Vol. 55, pp. 747-755): *Taylor & Francis*.

Podkalicka, A., & Fredriksson, M. (2023). Mediatised marketplaces: Platforms, places, and strategies for trading material goods in digital economies. *Convergence*, 13548565231192103.

Polanyi, K. (1944). The Great Transformation. NY: Farrar & Rinehart. Inc, New York. Qureshi, Z. How Digital Transformation is Driving Economic Change. 2022. In. Qureshi, Z. (2022). How digital transformation is driving economic change.

Rawls, A. (1971). Theories of social justice. In: Harvard University Press Boston. Rights, I. P. NAFTA 2.0 and intellectual property rights.

Rodrik, D. (2011). The globalization paradox: Democracy and the future of the world economy. WW Norton & Company. Rousseau, J.-J. (1987). [1762] The Social Contract. The Basic Political Writings.

Russell, S., & Norvig, P. (2016). Artificial intelligence: A modern approach, global. In: Pearson Higher Education.

Saba, D., Sahli, Y., Maouedj, R., Hadidi, A., & Medjahed, M. B. (2021). Towards artificial intelligence: concepts, applications, and innovations. *Enabling AI Applications in Data Science*, 103-146.

Saura, J. R., Reyes-Menendez, A., Matos, N., Correia, M. B., & Palos-Sanchez, P. (2020). Consumer behavior in the digital age. *Journal of spatial and organizational dynamics*, 8(3), 190-196.

Schumpeter, J. A. (1942). Socialism, capitalism and democracy. Harper and Brothers. Schwab, K. (2015). World economic forum. Global Competitiveness Report (2014-2015). Sen, A. (1999). Development as Freedom, Oxford University Press, New York.

Smeets, M. (2021). Converging thought on digital trade in preparing for the future in. Adapting to the Digital Trade Era, Challenges and Opportunities; WTO: Geneva, Switzerland. Smith, A. (1999). The wealth of nations: books IV-V (Vol. 2). Penguin UK.

Soroka, T. (2023). Canada's Temporary Labor Migration Policy: The Case of Mexican Seasonal Agricultural Workers. Politeja-Pismo Wydziału Studiów Międzynarodowych i Politycznych Uniwersytetu Jagiellońskiego, 19(81), 279-303.

Takigawa, T. (2022). What Should We Do about E-Commerce Platform Giants?—The Antitrust and Regulatory Approaches in the US, EU, China, and Japan. The Antitrust and Regulatory Approaches in the US, EU, China, and Japan (March 3, 2022).

Tapscott, D., & Tapscott, A. (2016). Blockchain revolution: how the technology behind bitcoin is changing money, business, and the world. Penguin.

Taylor, L. (2017). What is data justice? The case for connecting digital rights and freedoms globally. Big Data & Society, 4(2), 2053951717736335.

Tod, D., & Tod, D. (2019). Data Analysis and Synthesis. Conducting Systematic Reviews in Sport, Exercise, and Physical Activity, 115-129. Ventures, C. (2021). Cybersecurity ventures' 2019 cybersecurity market report. In.

Voigt, P., & Von dem Bussche, A. (2017). The eu general data protection regulation (gdpr). A Practical Guide, 1st Ed., Cham: *Springer International Publishing*, 10(3152676), 10-5555.

Volk, C. (2022). The problem of sovereignty in globalized times. *Law, Culture and the Humanities*, 18(3), 716-738.

Whitmore, A., Agarwal, A., & Da Xu, L. (2015). The Internet of Things—A survey of topics and trends. *Information systems frontiers*, 17, 261-274. Wittgenstein, L. (1953). 2001. Philosophical investigations, 3.

WTO, Q. (1998). Work programme on electronic commerce. In: World Trade Organization Geneva.

Wu, T. (2017). The attention merchants: The epic scramble to get inside our heads. *Vintage*.

y Mpofu, F. (2022). Sustainable mobilisation of tax revenues to enhance economic growth in Sub-Saharan Africa: Challenges, opportunities, and possible areas of reform. *International Journal of Research in Business and Social Science* (2147-4478), 11(9), 222-233.

Yamey, B. S. (1949). Scientific bookkeeping and the rise of capitalism. T*he Economic History Review*, 1(2/3), 99-113.

Zouhair, A., & Kasraie, N. (2019). Disrupting fintech: Key factors for adopting bitcoin. *Business and Economic Research*, 9(2), 33-44.

Zuboff, S. (2019). The Age of Surveillance Capitalism. New York: PublicAffairs. *Ethics or Quality of Life*, 269.

海野一隆. (1958). EGR Taylor: The Haven-finding Art, A History of Navigation from Odysseus to Captain Cook. Hollis & Carter, London, 1956, 295 p. 30s. *Japanese Journal of Human Geography*, 10(2), 152-152.